DETAILED ACTION

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Wolfgang Stutius on 03/17/2010.

The application has been amended as follows:

Specification page 2, lines 18, after "Medcyclopaedia™", "(www.medcyclopaedia.com)" has been deleted.

Claim 123 has been replaced as follows:

An apparatus for detecting clinically-relevant features of a gastrointestinal (GI) tract of a subject, comprising:

an oral contrast agent consisting essentially of a stable and non-radioactive isotope, adapted to be administered to the subject;

a capsule adapted to be swallowed by the subject, said capsule including:

at least one radiation source emitting X-ray or gamma radiation having an energy of at least 10 keV;

at least one radiation detector comprising at least one collimator configured to detect a first energy window collimated X-ray fluorescence radiation from the X-ray contrast agent composition excited by the emitted radiation, and to detect a second energy window Compton-backscattered radiation from the X-ray contrast agent and the wall of the GI tract produced in response to the emitted radiation; and

a control unit configured to analyze data regarding the detected X-ray fluorescence radiation and Compton-backscattered radiation to identify a distance between the capsule and a wall of the GI tract,

said control unit further configured to compute a ratio between the Compton-backscattered radiation and the X-ray fluorescence radiation signals for distinguishing between gas in the GI tract and the clinically-relevant feature.

The claims have been amended as follows:

Claim 127, has been canceled.

Claim 128 has been canceled.

Claim 145 has been canceled.

Claim 146. The apparatus according to claim 137, wherein the ~~control unit~~ detector includes means for activating ~~preventing~~ the radiation detector and electronic circuitry upon movement of the colon wall ~~from detecting radiation, and for preventing the~~

~~control unit from analyzing the data, until the capsule has reached the area of clinical interest~~.

Claim 155. (Currently amended) A method for detecting clinically-relevant features of a gastrointestinal (GI) tract of a subject, comprising:

orally administering to a subject a radiopaque X-ray contrast agent composition consisting essentially of a stable, non-radioactive isotope;

orally administering to a subject a capsule emitting X-ray or gamma radiation having an energy of at least 10 keV;

measuring, from within the GI tract, concurrently in a first energy window a first radiation signal generated responsively to the emitted X-ray or gamma radiation, said measured first radiation signal representing collimated Compton-backscattered radiation, and in a second energy window a second radiation signal representing X-ray fluorescence (XRF) radiation from the X-ray contrast agent;

computing a ratio between the first radiation signal and the second radiation signal for distinguishing between gas in the GI tract and a clinically-relevant feature.

Claim 161 has been replaced as follows:

Claim 161. A capsule, adapted to be swallowed by a subject, for detecting clinically-relevant features of a gastrointestinal (GI) tract of a subject, comprising:

at least one radiation source emitting X-ray or gamma radiation having an energy of at least 10 keV;

at least one radiation detector comprising at least one collimator configured to detect a first energy window collimated X-ray fluorescence radiation from the X-ray contrast agent composition excited by the emitted radiation, and to detect a second energy window Compton-backscattered radiation from the X-ray contrast agent and the wall of the GI tract produced in response to the emitted radiation; and

a control unit configured to compute a ratio between the Compton-backscattered radiation and the X-ray fluorescence radiation signals for distinguishing between gas in the GI tract and a clinically-relevant feature.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HIEN NGUYEN whose telephone number is (571)270-7031. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Long Le can be reached on (571)272-0823. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. N./
Examiner, Art Unit 3768

/Long V Le/
Supervisory Patent Examiner, Art Unit 3768